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HEPATICO-CARDIAC SEDATION.

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The daily, nay, almost hourly complaint by persons, of biliousness, and the frequency with which the physician announces to patients that the liver is out of order, seems in large part justified by the multifarious and most important functions that have recently been assigned to this huge or largest gland of the body. In other words, physiological science has confirmed empirical observation in a very unexpected manner, taking us back and conforming, in large part, to the opinions of Galen. If the function of the liver is simply, as has for a considerable time been supposed, to secrete bile, a mystery of mysteries lies in the fact that it is so frequently deranged, and that the symptoms should be so multifarious, nay, often conflicting, yet, by the logical process of exclusion, incapable of being referred to a fault of any other organ of the body.

The obsolete conception that the liver is only a bile-making structure, is now supplanted by far more important functions; sanguification, or the completion of certain phases of blood integration; and the beginning of a certain line of blood disintegration; the whole being attended by the evolution of much heat. The glucose and lævulose of digested aliments are there converted into fat, but more largely into glycogen; and this saccharine condition is at least favorable, if not essential, to a rapid cell growth of the blood, precisely as it is known to be for the rapid cell

growth of plants, as well as to the motions of the colorless blood corpuscles. In confirmation of these doctrines is another fact—the blood, on emerging from the liver, is denser, and richer in white corpuscles than on entering; it also, in passing through this organ, becomes partially disintegrated; the proportion of red corpuscles decrease, but especially does a large proportion of the blood fibrine disappear; Brown-Sequard calculates the amount to be no less than about 86½ ounces per day.

It is apparently fully determined by experimental evidence that this breaking up of the albuminoids largely results in the formation of urea; and therefore, it is concluded that the function of the kidneys, so far at least as this product is concerned, is not secretive, but eliminative merely, precisely as in the pathological condition of diabetes mellitus, when the glyco-genetic function of the liver is enormously enhanced. The kidneys are not the sugar-forming, but only the sugar-eliminating, organs. Of course, if the liver is the arena of such active blood transformations it is consonant with existing knowledge to suppose that a large amount of heat would be disengaged, a conjecture fully verified by Bernard, who found the temperature of the hepatic vein uniformly higher than that of the portal, and that of the vena cava higher than any other region of the body.

It is obvious that such an enlarged view of the hepatic functions renders, as Murchison well remarks, the old arrangement of its functional derangements into increased secretion, decreased secretion and altered secretion, no longer tenable. An arrangement based upon the supposed pathological changes of its leading products is also

open to insurmountable objections. In the first place, even if all the functions ascribed to the liver were settled beyond dispute, it is not practicable to arrange its processes in any sequential order, as none of them are clearly defined dependents one upon the other. It is not known, and probably never will be, what relation the liquid transformations of the liver hold to each other. It is quite impossible for any one to say whether glycogenesis precedes, attends or follows defibrination and bile secretion; and, granting that deranged biliary secretion be ascertained in any given case, whether it preceded, followed, or what effect it has, and what relation it bears to the other hepatic functions. It doubtless would appear more profoundly learned to arrange the functional derangements of the liver into deranged glycogenesis, deranged sanguification, deranged defibrination, and deranged biliary secretion; but until we can determine where the initial fault begins in any of these disorders, what effects one form of derangement has upon the others; whether, in fact, these functions, and hence their derangements, are causal, successive or simultaneous, it would be the merest pretence of an assumed wisdom to base a classification of morbid derangements upon such speculative physiological intricacies.

No practical advantage, but rather the contrary, can accrue from such purely speculative assumptions as a basis for the indications of therapeutical action. Upon what, for example, depends imperfect and excessive glycogenesis, and what relation do these derangements hold to blood defibrination, to sanguification and the secretion of bile? So complex, so multifarious a function cannot be segregated into interacting and non-interacting processes, at least, in the present state of knowledge.

A classification of diseases based upon structural changes is, of course, precluded in the functional variety, and when it cannot be thus made, or upon manifest changes of liquid products, in other words upon definite and uniform changes of material forms, the only remaining resource lies in changes of the manifestations of the physiological action, or, in other words, on symptoms. Such we think, in the present state of knowledge, is the only tenable standing ground for a classification of the functional derangements of the liver. It has the very great advantage of not being founded upon doubtful or recondit processes, or upon views of them which the next ten years may show to be fallacious, but upon real, unmistakable manifestations which every ordinary observer can verify for himself. And, after all,

what are symptoms but the first, the ever varying, manifestations of material organic changes which in their beginnings are far too subtle for our gross sensual apprehension. A skillful interpreter of symptoms must therefore always take therapeutical precedence of the pathological expert. The former is able to detect, from modifications of the vital force, the initial departure from the healthy state, far in advance of the ability of the pathologist to detect changes of form; and is thus enabled to take timely and successful interference by the foretop. The one is like the acute observer who is able to discern from certain signs that alcohol is present in the cerebrum, but the other says wait until I analyze the urine, or the breath, and examine the cells of the brain under the microscope. The wisdom of one is at least ante-mortem, and abreast of the abnormal process; that of the other is post-mortem, or follows after, and records the processes of destruction. Gross as this illustration may be considered, it is that practically taken to-day by the great school of pathologists in regard to the therapeutics of tuberculosis. Of what avail are or can all their pathological researches be as to tubercle, in reference to the symptoms or management of the pre-tubercular stage—the time, all must admit, during which therapeutical measures are by far the most likely to prove successful?

For the purposes of description and the systematic outlining of knowledge, names for groups of symptoms are indispensable; but if it be desirable, and who will say nay, to make the practice of medicine an almost exact science, I may be allowed to avow an ever strengthening belief, the outcome of long and assiduous clinical study, that it will be rendered so, or make its nearest approaches thereunto, through the nice adaptation of medical potencies to kinds and groups of symptoms. In truth, the principle should be paramount in the treatment of all disorders; the name of a disease ought to be regarded as nothing more than a general term, embodying some special characteristics which no more define individualism in disease than the term Caucasian defines the personality of members of the race. To treat diseases according to such general names or terms is very much like the barbarian method of looking for a criminal under the general idea of Anglo-Saxon, and then seeking to inflict vengeance upon any or all conforming to the standard.

The symptoms of a disease are of almost infinite variability, never exactly alike in any one disease nor in the same person from day to day,

but so also are the effects of the medical potencies and their combinations at our command.

By symptoms and indications are not meant appearances in a narrow sense, but in the broadest one, including heredity, temperament, diathesis, habits, occupation, age, sex, morbid history, etiological influences, general appearance, and the existing state of all the organs of the body objectively and subjectively considered. From them may be gathered the clue to the keynote of a morbid process which only needs to be touched by the appropriate medical potency to respond in a most satisfactory manner. All this, it must be confessed, in its clinical application, is not knowledge transferable to the pages of a book, it is not a series of scientific details that can be laid down concisely in words, but it is a *skilled art* based on the largest knowledge of man physically and psychically, with an accurate knowledge of the numerous instrumentalities by which the vital processes are modifiable.

In naming a disease from its symptoms, it is not practicable to condense them into a single expressive word; the only available method is to take advantage of two or three characteristic and invariable symptoms. This I have done in the present instance, in order to describe *one of the several functional derangements of the liver*, and a form of functional derangement, by the way, that I have derived from no writer, but have drawn the features of it wholly from nature. Beginning long ago a careful study of the subject, incited thereto by a humiliating consciousness of the large number of cognate derangements carelessly classed under the term bilious, in the hope that I, at least, might be able to prescribe with less vagueness, more discrimination and increased success. One of the outcomes of this line of study is that to which the reader's attention is now invited.

By hepatico-cardiac sedation is meant a remarkably slow acting heart, the result apparently of some morbid material in the blood, in some respects like, in others very unlike, the presence of veratria in the blood, and which, reasoning by the method of exclusion, can only be referred to faulty hepatic action. The accuracy of this reference has been fully verified by the results of therapeutical measures. It is far from an uncommon, and is, by the way, a very interesting, phase of disease. In this latitude I meet with at least a score of well defined cases annually. In its milder aspects it may and usually does escape a clear and distinctive apprehension by the practitioner, but in its most obstinate and aggravated form the characteristics of the dis-

ease are so striking that there is scarcely a physician in large practice who cannot recall a number of cases conforming in exact detail to the assemblage of symptoms I am about to narrate. More likely than otherwise such cases were diagnosed differently than is indicated at the head of this article; perhaps as some obscure and threatened cerebral lesion, or as some cardiac or lung derangement of a not very well defined character. Especially will the recollection be likely to arise in the mind as to those in whom the derangement had reached a fully developed and aggravated stage, as manifested by a greater intensity of the symptoms than ordinary, and particularly by a remarkable persistence, frequently lasting for months and even for years.

It is well known that the kidneys form the main outlet for the effete azotized matters of the blood, and that the hydro-carbons are largely oxidized in the lungs, some of them in the liver, the decomposing matters of the latter changes being in large part excreted through the liver and intestinal canal. There are good grounds for the opinion that the functions of the lungs and liver have a very intimate, and to a certain extent, vicarious, relationship; that is, when those of the lung are especially active, as during the frigidific season and in arctic regions, that of the liver is correspondingly inactive, and *vice versa*. Nevertheless, this correlation of function has important diversities when the functional entities of the two organs are taken into consideration. For instance, some of the hydro-carbonaceous compounds appear to be incapable, as far as known, or are in a form not susceptible, of pulmonary oxidation, as for example, the cholestrine and the pigment of the bile, both of which are very rich in carbon, and are mainly, if not wholly, excrementitious. It seems, also, that these substances only find their way out of the system under physiological conditions, through the liver and intestines. Concretions of them, it is well known, are often found in the gall bladder, and the normal tint of the feces depends upon the bile pigment, which thus passes out of the system as a waste substance. Suppose, then, that the effete products of liver metamorphosis, or the components fitted for excretion, accumulate in the blood to an abnormal extent, what would be the effect? Not necessarily, the expert in medical knowledge will answer, any marked derangement of the liver, but more probably upon the organic centre the most sensitive to abnormal matters in the blood. This centre, as all know, is the nervous, and it is precisely upon this that the most marked effects of the excess in

question, as we shall presently show grounds for believing, is produced. I am fully aware that this is only a hypothesis, plausible, some may think; and unfortunately, like many others in medicine, incapable of experimental verification. Yet, it is a hypothesis not thought of before; but after a careful study of the facts it grew out of them, grew out of a careful study and analysis of clinical data, and like all similar and trustworthy expedients of the kind, serves to make plain what was before obscure, harmonizes apparent anomalies, and more than all furnishes a clue to guide us nearer to the goal we are all seeking—a closer approximation to perfection in knowledge and command over undesirable conditions (the grand ultimata of all science), and hence, of an increase in power to modify or remove them. Had this theory of some abnormal product in the blood arising from hepatic inability failed me among my clientele, it would not have been laid before the reader. And in this connection it may be well to bear in mind the fact that three-fourths of our conceptions as to the causes of disease are purely hypothetical, and so long as they are good working hypotheses, the best we have, they should be retained. But at the same time another truth should not be forgotten, that a hypothesis which happens to be ingrained in the mind from our earliest recollection is not on that account a whit nearer correctness, and ought not to hold a more sacred place than one more recently advanced. Not the age of a doctrine, but is it a true one, or nearer the truth than anything before advanced? this is the axis around which should freely revolve our conceptions and adoption or rejection of doctrines not absolutely demonstrable.

This hypothesis of a retained hydro-carbonaceous excess is not unsupported by analogical evidence. Gout and rheumatism are commonly attributed to insufficient renal excretion. It is true that the analogy between inadequate depuration of the blood by the liver and kidneys is not complete, as the elements taken from the blood by the latter are wholly excrementitious, while those of the liver are but partially so. But the appositeness of the analogy for our present purpose is not much weakened by this difference, as the question here is not as to the effects upon the organism of an insufficient amount passing into the intestine in the one case, and into the bladder in the other, but as to the effects of an over supply of components in the blood especially adapted for transformation or elimination.

Problematical as such a sanguineous excess of the biliary components may appear, and that

certain morbid symptoms denote their presence in the blood, the liver all the while acting in a normal or not perceptibly abnormal manner, there is really no more a *priori* improbability that this should occur in regard to the functions of the liver than there is in regard to the functions of the kidney. This granted, the reader is then in a frame of mind to consider unbiasedly the evidence on which the assumption is based. I say assumption, for such it is, precisely as three-fourths of the states named disease are assumed to depend upon a *materies morbi*, the reality of which has not been demonstrated.

Upon these considerations, and others of an allied character, together with a studious differential analysis of clinical data, and the carefully observed effects of therapeutical agents, I have been led to the conclusion that the following symptoms are due to an inadequate action, or more probably to an excess of the components fitted for hepatic transformations; a heavy, dull listlessness, often amounting to an enervated, stupid, somnolent feeling, or inability to read or think for a short time without falling asleep. The spirits are gloomy and irritable, the complexion is as clear as usual, the tongue is clean, the appetite good, digestion easy and apparently rapid, the bowels are regular, their discharges natural in tint and consistence, the renal secretion is normal, but the pulse is invariably remarkably slow, often not more than 40 or 50 per minute, and sometimes intermittent. A sudden movement, however, as in rising to the feet, will often cause it to run a little faster, or up to the normal rate. There are no unnatural cardiac sounds, the respiratory murmurs are not, as a rule, those of disease, but the breathing is apt to be sighing and superficial, or as if the inspired air never reached the base of the lungs. The peculiar pulse is quite pathognomonic; hypochondriasis almost equally so; and vertigo, especially on arising from the stooping posture, is a frequent concomitant. The general energies are far below the natural standard, and the subject is prone to view his disabilities, though attending in a listless manner to his ordinary avocation, in the darkest light.

The sluggish cardiac action appears to affect the thoracic functions peculiarly. A sensation of weight and oppression are felt about the base of the lungs, which usually leads the patient to suppose that the lungs are diseased, but which in reality is wholly due to a languid pulmonary circulation. The slow pulse is apparently the effect of inhibitory nerve power, not affecting it appreciably in strength or in fullness, only in

frequency. The source of that inhibition is only explicable in such cases on the theory of an excess of some of the biliary constituents in the blood acting upon the cardiac and respiratory nervous axis. This view is rendered highly probable by the experiments of Messrs. Fultz and Kitler, who conclusively established the fact that by the injection of bile into the blood in non-poisonous doses the pulse diminishes in frequency, the respiration slackens, and the arterial tension and temperature fall. (*Bullen. Gen. Therapeutics.*)

The *materies morbi* which thus begets cardiac sedation also acts as a powerful depressant upon the animal spirits. In this respect it is the exact opposite of the exhilarant influence of alcohol, and like it is also probably capable of exciting grave cerebral disease when long continued, and when acting upon susceptible subjects. I have a strong impression that this is the *fons et origo* of many instances of melancholy insanity. In it we discern the power of a strong centric nervous depressant, and the inference that its protracted influence should engender cerebral lesion is in entire accordance with the currents of our knowledge. Indeed, I have frequently met with cases of this disease in which the mental depression was so deep and so well known that had the hints of suicide been carried out, coronial wisecrackers would have adjudged mental derangement as the cause.

Increased observation deepens the conviction that insane melancholy and suicidal mania are the not uncommon outcomes of the long continued influence of this cerebral depressant. It is scarcely reasonable to suppose, if the presence in the blood of an agent having such marked power over the cerebral functions be granted as probable, that no deleterious effects are likely to arise in its structure, especially in those enervated or predisposed to mental derangement. The traditional influence which the liver has been supposed to exercise over melancholy is as old as the history of medicine; indeed, Galen went further in this respect than modern writers, but probably no further than accurate observation warrants; and if these inferences are correct the doctrines and practices which they will lead physicians to pursue are of the very deepest import to the peace, joy and happiness of many a household.

The effects of this retained excess on the spirits are not alone of a melancholy character. Those of the nervous temperament are rendered extremely irritable, and liable to fits of unusual irascibility; those of the lymphatic become

more taciturn and stolid; those of the bilious are peculiarly gloomy and morose. If a predisposition to cephalalgia exists there is usually present depressing and persistent headache—not over the eyes, as in gastric derangement, but over the entire head, and intense if anywhere along the base of the skull.

This form of derangement is an eminently chronic one, never appearing on one day and disappearing the next, but coming on by slow genesis and gradual accretions, and is seldom removed in a few days, even under the best treatment. Under the worst it may endure for months, or indefinitely. Subjectively, the most characteristic symptom is that of a gloomy, morbid introspection, the victim appearing incapable of keeping his mind for a single wakeful hour away from the most dark and despondent views as to his condition. He may try to escape this thralldom one minute, but the next it is upon him in full force, and the will power strives against its masterful influence in vain.

Reasoning by exclusion, no organic structural change can be located which suffices to account for the depressing, not immediately dangerous, but to the patient extremely apprehensive, disorder. The patient's relation of his symptoms naturally inclines the thoughts to the indefinite condition known as biliousness, or hypochondria; but the natural appetite, the good digestion, the regular bowels, the clean tongue, pleasant morning taste, clear complexion, freedom from nausea and frontal headache, and limpid colored urine, negative the supposition. Nearly all those thus affected are from the strong, vigorous and well-nourished classes, and are not in any way given to inherited or acquired hypochondria. There being neither the history nor the signs of cardiac nor of cerebral lesions, no mental resource is left, than the adoption of the conception which seems entirely legitimate, that there is some abnormal product in the blood which acts as a depressant upon the heart and nervous centres, and that if so, through elimination only can relief be obtained. Suppose, as is commonly the case, the disorder is carelessly classed as biliousness, and a few mercurial cathartics are ordered, the benefit, if any, will be merely temporary. Is this rational practice? The symptoms, as related, are peculiar; is the application of the remedies likewise peculiar? Not at all; it is, in fact, the very opposite of rational therapeutics, whose cardinal principle may be said to be the accurate determination of individual deviations from health, and the selection from a large collection of curative agents of the one

or ones the best of all adapted for their removal. In proportion as accuracy of the conceptions and fullness of knowledge are gained on these points, does the practice of medicine approximate the standard of an exact science.

The leading cause of this form of disease may, of course, be inferred from the foregoing remarks. It does not arise in any way from a deficiency of the ordinary amount of bile secretion, but apparently from an undue amount of some biliary component, that can only find its way out of the system through the liver. It is useless to conjecture what form such biliary elements may assume through prolonged retention, but that the impact of the depressing power falls with special force upon the nervous centres seems scarcely open to doubt. In no other way and by no other class of retained elements can the peculiar sedation upon the nervous centres be satisfactorily explained.

The diagnosis is seldom difficult, as the symptoms are quite characteristic. A very listless, unwonted and persistent depression of spirits and of nervous energy; an abnormally slow pulse; when at rest slightly oppressed respiration, with occasional attacks of vertigo, are the positive and constant symptoms; while the negative signs are quite as characteristic: absence of any evidence of digestive derangement, of intestinal torpor, of cardiac lesion, or renal disease, of a dark or sallow hue of the skin, or of pain, dull or acute, in any region of the body. The appetite is almost invariably good, sometimes too good, the digestion easy. There is no sub-scapular pain, or if so, insignificant and transient, and the area of hepatic dullness is not increased. This form of disease is almost invariably seen in strong, well nourished persons, and is only met with in general practice at more or less extended intervals. It is of no little interest, on account of its duration and obstinacy to all except appropriate treatment, and from its liability to be mistaken for latent mental derangement or incipient cardiac disease. This may be more clearly apprehended, and at the same time assist in impressing the distinctive features of the disease upon the reader's attention, by relating the following cases:—

Theo. R., a prominent citizen of the southwest part of Licking county, had been seeking relief in vain for at least six months, near his home, at this place, and in Cincinnati, for the following symptoms: he had a healthy look, a good appetite, untroubled digestion, regular bowels, except when disturbed by medicine, but he complained of unwonted languor and sense

of debility. The tongue was clean, the taste good, the appearance of urine and feces normal. He had no cough, the respiration was heavy, sighing, and as if the air never reached the pulmonary basis. His pulse was of fair volume and strength, regular, but only forty per minute. The cardiac sounds were ordinary, and percussion revealed nothing abnormal. He acknowledged to very low spirits and to gloomy forebodings, a thing quite unusual with him. Two old physicians had diagnosed incipient lung disease, of what kind I could not learn. Another decided that some kind of a structural lesion existed in the heart. Differing as I did from the opinion of his former attendants as to the nature of his case, and deciding that all his symptoms arose from a sanguineous *materies morbi*, which must be eliminated through the agency of the liver, treatment was accordingly thereunto adopted, and within two weeks a very decided improvement was perceptible, the first so far that he had experienced, which, under a course of two months, resulted in a complete and final removal of his miserable ailment.

In another instance lately under my care, the very slow pulse, the melancholy, the ever recurring thoughts of suicide, the vertigo, and a dull aching in the basilar region of the brain, led several physicians to diagnose incipient cerebral disease, for which he had taken the bromides largely, cathartics and opiates, in vain. All of which symptoms were permanently removed by mild remedies addressed to the liver, for the purpose of promoting a gradual but steady elimination through that channel.

In reference to treatment, perhaps some of my readers will be ready, like some inquirers of the Central Ohio Medical Society, to whom the substance of the foregoing was read, to say, You would employ mercurials, of course. Emphatically, no. Entertaining a very exalted opinion of the great value of mercury in some forms of acute disease, and sometimes for a brief period in chronic disorders, it will nearly always signally fail in this one. At the least, quite a large number of persons have been under my care who had tried mercury faithfully, but with only transient benefit. In fact, after a time they declared that they became decidedly worse. According to my observation, repeated doses of mercurials afford decided but transient benefit, but if continued too long, decided debility ensues; and as soon as the immediate effects pass away, the symptoms recur, if anything, to a more intensified degree. As a rule, in the management of any lingering disorder, where the influence of a drug

potency needs to be continued for a succession of weeks, mercury is by no means the most successful remedy; it is far too wasteful of blood organization, far too debilitating, even in small portions, to be continuously beneficial in organic insufficiency. The most efficient and unobjectionable remedy in the treatment of this disorder is the extract podophyllum, or its resinoid, podophyllin. The former is to be preferred, as it is less nauseating, easier taken, and is more readily absorbed. In full doses, or in delicate or susceptible subjects even, its operation may be a little unpleasant, such as occasional sensations of qualmsiness and griping pains, with small, but frequent stools, abounding in mucus. These symptoms may be, in large part, obviated by combining it with the fluid extract of leptandrin. On strong, vigorous subjects these effects, however, seldom occur, except after a too large dose. The object should be to keep up a gentle but continued impression, by administering from five to ten drops of the fluid extract, combined with a drachm of leptandrin, three or four times a day. The sufficiency of the impression may be measured by the effect upon the bowels, and this should be of an increased activity, say from two to three evacuations per day. Captious conservatives are very likely to say, how do you know that these agents act as cholagogues. On this I claim no special insight, but this, at least, is well known, that increased vermicular activity of the stomach and bowels leads to an increased flow of bile into the duodenum, and if the former are enhanced and the bowels preternaturally active, a large part of the two pints of bile which is normally discharged into the bowels each day is not reabsorbed, but carried out of the body, thus depleting the blood largely of the bile components. True, any kind of laxative may do the same thing to a certain extent, but as experimental observation on animals convinces some far more effectually than the most careful observation on the human subject, the experiments of Prof. Rutherford should be read,* which show that some cathartics, by increasing the activity of the intestinal glands, reduce the flow of bile, while others do not, but rather tend to increase it.

If the action of podophyllin is somewhat slow, it is more enduring than that of any other cholagogue, and two doses per day are oftentimes quite enough. Sometimes I have had to administer as much as fifteen and twenty drops twice or three times per day, to establish the needful increase of excretory action. But this is only met

with in those who have a maximum of resisting power to therapeutic influences.

Individual peculiarities may require some additions or modifications of this treatment, but the above remedies are the main dependence, and which, so far, have not failed me, even in cases of protracted duration, and after other physicians had tried and failed in removing what some of them, at parting with their patients, were fain to term little more than hypochondriasis. Had the physician himself been the subject, indignation would have been added to his bitter mental depression. It is high time that the profession should recognize that such states of the mind have a material basis or cause, and the disposition to make light of them is akin to that of the vulgar populace, who are loth to admit that the first signs of an old-time neighbor becoming insane are anything more than freaks of the imagination, or pure devilishness.

The diet, meanwhile, should be mainly vegetable, eschewing sweets and fats to any liberal degree. Acid drinks, especially buttermilk, during the warmer months of the year, are not only grateful and strongly craved, but are also apparently conducive to a restoration of a healthy state of the blood.

INSANITY OF LACTATION.

BY HENRY BEATES, JR., M.D.

Read before the Northern Medical Society of Philadelphia.

The patient upon whom the following remarks are based is a married lady, aged 18, diminutive in stature, but well developed. Her family history indicates a nervous hereditary predisposition. The grandmother was a victim to traumatic epilepsy, and her offspring evinced a general nervous excitability among the female, and a tendency toward melancholy on the male side.

During gestation the patient confined herself rather closely to the house, only indulging in short walks early in the morning and late in the evening. She did not suffer from the maladies consequent upon early pregnancy, and enjoyed good health until the sixth month, when the mammae began to secrete a milky fluid, which increased in quantity to such a degree as to necessitate the wearing of a guard. This condition was allowed to continue throughout the remainder of her gestation.

Her disposition altered, from a mild and obliging to an impetuous and irritable state; apart from which, with the exception of restless and unrefreshing sleep, no special symptoms were recognized.

* Practitioner, London.

On October 4th, 1879, labor with the first child occurred and progressed very favorably. Three days subsequently, the mammae became greatly engorged, and a profuse galactorrhœa developed, producing sleeplessness, anorexia and malaise, and contributing very materially to her already increasing anæmia and exhaustion. In the course of a few days I was summoned to see the case in consultation, and found her pale and excitable, with no appetite, and inability to sleep. In addition, both mammary glands were indurated, projecting conically from the chest, red, increased in temperature, not very painful on superficial palpation, while movement of the whole gland occasioned severe pain.

As nursing was accompanied by intense suffering and followed by prostration, the child was ordered to be fed with the bottle, and measures were adopted with a view of checking the secretion of milk and preventing the formation of abscesses. This was the eighth day after confinement. Three days later I was again summoned and found the patient furiously maniacal. She lay across the bed with her eyes widely opened, yet apparently recognizing nothing. Comparatively lucid intervals occurred, with a partial return to consciousness, during which the patient would scream, and manifesting great terror, endeavor to drive from her all who attempted to render assistance.

All but the husband were immediately sent from the room, which mitigated the patient's terror, and enabled me to ascertain the cause of her agitation. She experienced a great dread, for which no reason could be ascribed. During my interrogations a member of the family entered, and occasioned a repetition of the above phenomena. Half a grain of morphia sulphate was now administered, and effected an abatement of her excitement and enabled the patient to articulate more distinctly. Prior to the exhibition of the narcotic, her speech was incoherent and words were misplaced and very imperfectly enunciated. Perplexity of thought was especially noticeable, being characterized by the utterance of sentences conveying varied and disconnected ideas. After a second dose of morphia sulphate a short sleep supervened, from which the patient awoke considerably less agitated.

After being convinced that the child was able to take nourishment from the bottle, she consented to etherization, and the breasts were freely incised, from the base to the margin of the areola, and each engorged lactiferous duct was opened, with a view of preventing secondary abscess. About two fluid ounces of pus escaped from each

breast, and the hemorrhage was moderate. After recovering from the anæsthetic the maniacal excitement had almost entirely disappeared, and the true nature of the case became apparent. Apprehension was still a distinguishing feature, but hallucination characterized the form of the insanity with which we had to deal. The hallucinations were varied, but the greater number were of a terrifying nature. At one time she saw a woman rush through the apartment, carrying in her arms a child, which she threw into the open fire. Again myriads of faces crowded the doorways and watched her every movement; these eventually approached nearer, and finally, surrounding the patient, so overwhelmed her that she passed into the stage of delusion. This was the second day after the breasts had been lanced.

The insanity maintained this characteristic type, and the actions of the patient depended upon the nature of the apparition.

On the fourth day of the insanity an amelioration of the symptoms occurred, and improvement continued until the tenth day, when the patient regained her normal mental status.

After being able to sit up, a hysterical condition developed, which, under proper treatment, mainly physical, soon disappeared.

The wounds healed kindly, and in the course of a few weeks the patient was about the house as usual. The treatment consisted in the exhibition of liquid and nutritious diet and a pill composed of ferric pyrophosphate, resin of phosphorus, and extract of nux vomica.

Sleep was procured by opiates. The bowels were moved every third day by enemata. The febrile action throughout was very slight, at no time reaching above 100.5°. No renal, pulmonary, cardiac or subacute inflammatory condition of any kind co-existed.

The social state of the patient, with its perfect immunity from moral influences of a depressing nature; the utter absence of any co-existing pathological condition, the long duration of the cause, and nature of the insanity, with the hereditary predisposition, sufficiently distinguish this from puerperal mania as generally considered, and render further comment unnecessary.

The maniacal excitement first referred to is not to be associated as a symptom of the principal trouble, being referred to as it serves to illustrate that condition which is occasionally met in mammary abscess. The hemorrhage resulting from the mammary incisions added greatly to the already anæmic condition, and contributed as an exciting cause of the development of the disease.

HOSPITAL REPORTS.

LOUISVILLE CITY HOSPITAL.

CLINICAL LECTURE BY WM. H. WATHEN, M.D.,
Professor of Obstetrics and Diseases of Women and
Children, of Kentucky School of Medicine.

REPORTED BY A. H. KELCH.

**Diagnosis of Sex, Presentation and Position of
Fœtus.**

To-day, gentlemen, I bring before you these women, eight months pregnant, for the purpose of illustrating the practical importance of the application of physical diagnosis to the fœtus in utero.

By this means we are enabled to diagnose the existence and period of pregnancy, the presentation and position of the child, and to arrive at a probable conclusion respecting its sex; and with these patients I will illustrate this practically, in order to impress upon you the importance of this subject, which is, unfortunately, too little taught in the medical schools and in the various text books brought before the medical profession. You will observe that all the text books in the English language devote but little space to this subject; those in the French and German somewhat more, but none pay that attention that its importance demands. Yet, while we know this is true of the books, we know that, particularly in Germany, it has been taught for many years practically in the hospitals, by the leading obstetricians. It has been taught, to some extent, in this country, but to such a limited degree that all the older, and nearly all the younger practitioners know so little about the subject that they make no practical application of it in their obstetrical practice.

The methods we employ in making this investigation are inspection, percussion, palpation and auscultation. In a limited lecture like this it is, of course, impossible for me to dwell upon each of these points to an extent corresponding to its utility, and I will, therefore, confine myself to the consideration only of the cardinal points.

In order to make the examination properly, it is necessary to place your patient upon her back, her head slightly elevated, and limbs a little flexed, so that the abdominal parietes shall be relaxed, so that we may more readily feel the uterine walls. Otherwise, with the abdominal walls tense and contracted, we would have great difficulty in appreciating the conditions of the uterus, either by palpation or auscultation.

Then, the first thing to be considered is, what may be determined by inspection? By inspection we determine the general contour of the abdomen, that peculiar, rounded, ovoid, symmetrical shape, and the foetal movements through the abdominal walls; often an arm or leg of the child presses against the walls of the uterus, making an impression perceptible through the abdominal walls. Often, also, by inspection we may differentiate those motions that are perceived through the abdominal walls caused by an accumulation of flatus passing from one part of the alimentary canal to another, and those made by contractions of the abdominal muscles, from those of the

fœtus. But inspection, with the exception of percussion, is the least important of these means for arriving at conclusions concerning the conditions within the uterus.

By palpation we are enabled to mark out accurately the outlines of the uterus; to distinguish it from an enlargement of the abdomen caused by an accumulation of gas or of adipose tissue, or from a cystic tumor within the cavity, or any solid tumor within. If the condition present is that of pregnancy we will find a well defined tumor that we can mark out the outlines of in every part. We can also feel the irregularities produced in the uterus by the form of the child; we can feel the round, smooth, unyielding vertex, or the soft breech, or the smooth, yielding surface of the back, or the projections of a foot or lower extremity, seldom of an upper, because of the manner in which they are folded upon the breast. Again, you can distinguish by palpation between the movements of flatus, or abdominal contractions, and those of the fœtus; you may also distinguish between enlargement of the uterus and other abdominal tumors by the regular contractions in the uterine walls during pregnancy. So you see that by palpation alone we can almost diagnose the existence of pregnancy and exclude other enlargements.

Again, the importance of this examination becomes apparent when you see we can not only diagnose the existence of pregnancy, but determine as well the position of the child, often accurately.

By percussion we derive very little information in a case of pregnancy; so little that we will not now consider it at all, but come to the means that give us most reliable proofs in establishing what we claimed in the beginning of the lecture; that is, to auscultation. And we accomplish so much by auscultation because there are peculiar sounds present that represent certain facts by which we are enabled to arrive at positive conclusions. These are, first, the foetal heart sounds; second, the uterine souffle; third, the umbilical souffle; fourth, the sound that is heard in the decomposition of the liquor amnii, and lastly those caused by the movements of the child. All these may be heard, and are of some importance, while some of them are of very great importance, particularly those of the foetal heart. But these are not heard until about four and a half or five months after conception. Up to that time they amount to nothing, so far as we are concerned in this examination; but fortunately in the sense in which I present them to you to-day they appear sufficiently early to enable us to accomplish all the practical purposes for which we wish to determine the condition. It is not necessary that you should make an examination in a case prior to the seventh month, and generally it is sufficiently early between the eighth and ninth months, because the abnormal conditions that may be removed by proper interference should be let alone until this period.

The foetal heart sounds you are already familiar with, but in addition to that I want you to know how, by these sounds, we arrive at the conclusions I have already told you could be reached, and in order that you may understand the sub-

ject thoroughly and intelligently, I must now tell you the steps we take to make the examination complete.

The fetus in the uterus is doubled upon itself, and in the eight month of pregnancy the uterus has an ovoid form, with its long axis longitudinal. Then, if by a line we divide in the centre this ovoid tumor, through the fetus, we would find, of course, the heart in the cephalic extremity. Then, that being the case, if the heart sounds are in the lower part of the uterus we would usually have a vertex presentation, and *per contra*, if the heart sounds are heard in the upper part of the division, we would usually have a breech presentation.

Now, we want to know what is the position of the child, and in order to determine that, we divide the uterus, in a longitudinal direction, into two lateral halves. This, then, makes four segments; the right and left inguinal, and the right and left hypochondriac. Then, if the heart sounds are heard in the lower segment on the left side, about half way between the umbilicus and the anterior superior spinous process of the ilium, more perceptibly radiating in a direction toward the umbilicus, we have a vertex presentation, the first position, left occipito-anterior.

If we find the fetal pulse, instead, upon the right side, in the inguinal region, near the flank, we would then, for the same reason, have a vertex presentation, and likely the third position of the child, right occipito-anterior. Failing to distinguish it in either of these regions, if we hear it above and to the right side, we then have a breech presentation, with the back of the child to the right side; heard distinctly in the left hypochondriacal region, we have breech presentation, with the back of the child to the left of the pelvic cavity. If we hear it most perceptibly in the region just above the symphysis pubis, and immediately to the side of the linea alba, particularly if there is transverse enlargement of the uterus, we have, likely, a transverse presentation with the cephalic extremity of the child on the side where the sound is best heard.

Now, with these general rules, and by the knowledge you have derived from inspection and palpation, you can nearly always come to a correct conclusion concerning the presentation and position.

If there should be a twin pregnancy we may hear the fetal heart sounds distinctly in two different localities, but often by inspection we have our suspicions of the existence of such a condition aroused by the fact that there is a little sulcus apparent between the two children. And further, by palpation, we may detect the outlines of two distinct heads, and in this way make the diagnosis of twin pregnancy.

We may determine something respecting the condition of the child. If the heart sounds are clearly audible and regular, the child is probably in a healthy condition; if feeble and irregular, a feeble condition is indicated. During labor, if the heart sounds be found regular and strong, and then become irregular and feeble, you may know that the child is in imminent danger, and should be delivered as soon as possible.

What is the advantage of being able to diagnose the presentation and position of the child,

previous to the labor or just at the beginning? It is ordinarily of little importance, but in some instances it is of vital significance, because, when you have an abnormal presentation, a knowledge of the fact previous to the labor, or at the beginning, will enable you, in nearly every instance, by external manipulation, or by combined external and internal, to convert this into a normal presentation, and spare yourselves the trouble, and your patient the dangers, of a more serious operation after the labor has begun, and perhaps after the membranes have ruptured. What is now a simple and painless procedure becomes, at a later stage, one of the serious operations of obstetric surgery. The next step in our diagnosis is to determine the sex of the child. How are we enabled to do that? Well, it is clearly demonstrated that the fetal heart sounds of the male child are less rapid than those of the female, those of the male reaching ordinarily from 120 to 135; of the female, from 135 to 150. Thus we find an average difference of fifteen beats per minute, with an average of both male and female of 135. Taking, then, this 135 as the dividing line, we find that the child whose pulse is less than 135 is likely to be a male, with the certainty increasing as the number of pulsations decreases. When the number of pulsations are above 135 the probability is that the child is female, with the certainty increasing in proportion to the rapidity of the pulse.

The next consideration is the uterine souffle. This is not a positive evidence of pregnancy, but it is of considerable importance taken in connection with other symptoms. It is the blowing or whizzing murmur caused by the rushing of blood through the uterine vessels. It is also not appreciable until about the end of the fourth month of pregnancy, a sound that is sometimes more intense than at others, and sometimes entirely absent.

When it is heard during labor it is found to become more intense at the beginning of a uterine contraction, subsiding as the acme is reached, and again appearing as the contraction disappears. For this reason we infer that it is probably produced by the contractions of the uterus during pregnancy.

The next sound is the umbilical souffle. It is a sound that is not constant, in fact, is rarely heard, and when heard, is generally evidence that the fetus is sustaining some injury, by compression of the cord between the bony structures of itself and those of the mother, or by the cord being wrapped around the head, neck, or limbs of the child. When this sound is heard it is an important one, as indicating that the child is suffering from an interference with the circulation through the umbilical cord.

Having stated these propositions, now, gentlemen, I proceed to make a practical application of them to these cases before us.

* * * * *

By auscultation in this case I find the uterine souffle distinctly marked, and the heart sounds are perceptible over the right inguinal region. By palpation I find I can depress the uterus more easily on the left than on the right side. This right side feels hard, because the back of the child is directed against the wall of the uterus

at this point. The head is directed down against the superior strait, the occiput toward the right sacro-iliac synchondrosis. Then we have a vertex presentation in the third position.

This position, gentlemen, may possibly be changed before delivery. The child can, even up to the seventh or eighth month, change not only its position but its presentation. Then here is the third position, vertex presentation, with the uterine souffle well marked. Here we have an extraordinary pulse; it beats at the rate of 168 per minute. I should remark to you that the pulse may be increased by pressure upon the child, though it is not affected by the maternal pulse. In this case I diagnose a female child.

In this (the second patient) I cannot perceive any sound except that made by the foetal heart. It is most perceptible in the left inguinal region, midway between the superior spinous process of the ilium and the umbilicus, radiating in the direction of the umbilicus. This, then, is a vertex presentation, in the first position, or left occipito-cotyloid. In this case I also find the pulse unusually rapid, over 160 per minute. So, at the proper time, we shall expect these two women to increase our population by the addition of two female children.

MEDICAL SOCIETIES.

NORTHERN MEDICAL SOCIETY OF PHILADELPHIA.

Dr. Beates read a paper upon a case of
Insanity of Lactation.

Dr. J. B. Walker said he had never seen a case exactly like the one reported by Dr. Beates. Insanity connected with the puerperal condition was not uncommon at the Philadelphia Hospital. He related one case that had died in this condition when he was a resident in the wards. The autopsy revealed tubercles along the meninges. He believed, however, that these tubercles were a sequence rather than a cause of the trouble.

Dr. J. Collins has seen several cases. He thought that Dr. Beates struck the keynote when he said the patient was an exceedingly nervous person. He thought the case, as narrated, presented some of the elements of hysteria. The

Doctor then gave a graphic picture of a nervous girl, well educated in a moral sense, who had become pregnant in an unmarried state. She was in a state of great anxiety during the whole period of gestation, which reached a climax at childbirth. Then followed the exhaustion of lactation, during which time he thought it not strange that the nervous system gave way.

Dr. L. B. Hall related a case of highly sensitive mammae and nipples. The patient was married, and not of a nervous disposition; had she been otherwise he believed the mind would have given away under the intense pain and exhaustion of lactation.

Dr. Beates said he thought his case remarkable for the form the insanity assumed, that of hallucination rather than melancholia, which was more common in such conditions.

Dr. J. T. Eskridge gave the history of a case of typhoid fever, with a temperature varying very irregularly from 101 to 103½, and showing that the thermometer cannot be relied upon to diagnose that disease.

Dr. J. B. Walker related a case of acute rheumatism followed by phthisis. The chief interest centred in a heart murmur, developed during a relapse of the rheumatism. It had all the characters of an endocardial bruit, and was diagnosed as such. The subsequent history, however, proved it to be a pericardial friction sound.

Dr. L. B. Hall called attention to the relapse and heart complication in Dr. Walker's case, following the use of salicylic acid.

Dr. Walker replied that he believed alkalies to be the true treatment for rheumatism. He would, however, give salicylic acid in the acute stage. His case occurred at the Philadelphia Hospital, where the attendant was practically under the control of the resident and nurse.

Dr. J. T. Eskridge uses salicylates, and has had heart complication to follow in only one of his last hundred cases.

Dr. J. Collins has abandoned the use of salicylic acid. Thinks better of the salicylates.

The Committee on Morbid Specimens reported that the worms presented by Dr. Rihl, and purporting to have been coughed up after hæmoptysis, were specimens of the common earth worm, and, therefore, were probably in the water taken to wash the mouth.

EDITORIAL DEPARTMENT.

PERISCOPE.

The Dangers of Habitual Headache, and of Intellectual Exertion of the Exhausted Brain.

Dr. Treichler, of Germany, says, in a paper, a translation of which appeared in the *Medical Press and Circular*, Wednesday, April 14th, 1880—

According to my experience, habitual head-

ache has considerably increased with boys and girls; it destroys much of the happiness and cheerfulness of life, produces anæmia and want of intellectual tone, and, what is worse, it reduces many a highly gifted and poetic soul to the level of a discontented drudge. Although it is more difficult to collect precise statistical data on habitual headache than on myopia, yet the result of various investigations at Darmstadt, Paris, and Neuenberg, goes to prove that one-

third of the pupils suffer from it. Undoubtedly the principal cause is intellectual over-exertion, entailing work at night, and the insisting by parents on the too earnest taking up of a variety of subjects—music among the rest.

The pathological anatomical changes in the worst cases of this unhealthy condition I consider to be a disturbance created by anemia in the nutrition of the ganglion cells of the cortex of the cerebrum. It is well-known that a badly nourished brain is much more quickly fatigued by intellectual exertion than a brain in normal condition, just as is the case with the muscles.

A second cause of habitual headache is a passive dilatation of the blood vessels of the brain, also connected with serious disturbances of nutrition, whereby the perivascular space around the capillary vessels is contracted, and the getting rid of used-up matter greatly impeded. Modern pathology now looks on progressive paralysis, in its earliest stage, as a vasomotor disturbance of nutrition of the cortex of the cerebrum, in which the vessels of the pia-mater get into a palsied condition of dilatation, and we have degeneration of the cortex of the brain produced by stagnation of the current of lymph.

When the ganglionic cells begin to be diseased by senile atrophy, the memories and scientific problems of youth are still clear, and can be reproduced, while the same ganglionic cells can no longer comprehend and work at new though much simpler scientific problems, and while, with regard to a thing of yesterday, the memory is uncertain. From this we may draw the following conclusions:—

1. That what the ganglion cells when in their full health and vigor have grasped remains; so that, after the lapse of half a century, and with the beginning of disease, it may still be reproduced.

2. That the ganglion cells diseased by old age are, in reference to the accomplishment of work, like greatly exhausted ones, and have lost the power of understanding and abidingly taking in new and difficult ideas. The ganglion cells, therefore, can only take in new ideas, as an intellectual acquisition, so long as they are powerful, are not exhausted, and are nourished with healthy blood. The boundary line is drawn here quite as exactly as is the quantum of nourishment for the stomach of an invalid.

3. That the constant addition of fresh subjects in the teaching programme, making night work necessary for the pupil when the ganglion cells are already exhausted, entirely defeats its object of enriching the intellect, because new ideas cannot then be really grasped, and confusion is produced as to what has been learned in the day. The great object of the school, therefore—earnest intellectual discipline, and the formation of the desire for continuous cultivation of the mind—is thereby frustrated.

Dress in Relation to Health.

The *Lancet*, for March 6, 1880, contains an abstract of a lecture on the above subject, by Dr. B. W. Richardson, delivered to a large audience at the London Institution:—

It was, he said, altogether apart from his pur-

pose to deprecate good fashion in dress. He thought every woman ought to make herself as becomingly beautiful as she could. Good health and good fashion would always go well together. Errors of fashion were due, as a rule, to the fact that fashions were dictated and carried out by vain and ignorant persons, who were skilled neither in art nor in the rules of health. Considering dress, first of all, in relation to its mechanical adaptation to the body, he objected to everything that led to unequal pressure and to tight bindings about the body, neck, feet, and limbs. Corsets, waistbands, garters, and tight shoes were specially denounced. The dress should be loose, and its weight borne by the shoulders. In the dress of men this was fairly accomplished, but the dress of women dragged from the waist, and occasioned physical bondage, which placed them at a great disadvantage as active workers. He condemned alike the corset and waist belt worn by women, and the strap and belt used by boys when performing gymnastic feats. The belt interfered with free breathing, and tended to produce hernia. He suggested as a reform in the dress of women that it should be made similar in most respects to that of men. He would have mothers clothe their girls precisely as they clothed their boys, with the one distinguishing mark of a light, loose, flowing gown. He next discussed the quality of clothing, and the amount required at various seasons. Warm clothing ought to be put on in September or early in October, and not left off till the close of April. Heavy underclothing should be avoided. There was no necessary connection between warmth and weight. He denounced black, and insisted that for all ordinary occasions light gray ought to take the place of black for the outer coverings of the body. Black was, in fact, of all colors the very worst, and those poor ladies who thought it necessary after bereavement to immerse themselves for months in crape were indeed to be pitied. After the suttee, it was almost the saddest of miseries inflicted by society on the already miserable.

So-called Senile Changes.

At the meeting of the Cambridge Medical Society, held on February 6th, an abstract of the proceedings of which appeared in the *Lancet*, Feb. 28, 1880, Dr. Humphry, in illustration of the subject of so-called senile changes, showed a specimen of fractured neck of the femur, taken six weeks after the injury, from a woman aged seventy-six. A longitudinal section showed the bone to be well and firmly united, a result owing partly to impaction. He doubted whether the reparative process was enfeebled by old age apart from other causes. He showed also the other femur, which did not bear out the prevalent view that the angle of the neck becomes less in old age. No doubt the angle of the jaw altered as the teeth disappeared, and the curve of the back yielded as the back muscles became weaker; but he knew of no evidence that any of the long bones altered. He had lately, with the help of Dr. Annington, made a number of measurements of the angle at the neck of the femur at

different ages, and he found that in a series of bones from middle-aged subjects the angle varied from 125° to 138° , and in a series from aged subjects it varied within the same degrees. In the femur of a woman aged 103 the neck had as wide an angle as that of a young person. Dr. Humphry showed also, from the same case, the cartilages of the ribs, which were soft to the knife and uncalcified. He considered calcification of the rib cartilages to be a morbid phenomenon, and not incidental to old age as such. In the case of old Parr, who died at the age of 153, Harvey observed the costal cartilages were quite soft to the knife; and it is probable that in every very old person they remain uncalcified. The significance of calcified costal cartilages is rather that the individual will not live to a very advanced age. In very old people there are not many appearances of disease of any kind—very few, in fact, of what are called "senile changes." The heart and aorta from the same case showed only slight traces of atheroma; and he would include atheroma of arteries as another so-called senile change which was not proper to old age as such.

Progressive Muscular Atrophy Following Injury.

The following case, under the care of Dr. Favy, Guy's Hospital, is recorded in the *Medical Times and Gazette*, April 10th, 1880:—

Walter L., aged thirty-seven years, a farm laborer, unmarried, was admitted first under the care of Mr. Davies Colley, on March 11th, 1880. His father is alive; his mother died twenty years ago, with an abscess in her neck; he has two brothers and one sister alive and healthy. Patient states that he himself has always been a healthy and temperate man. Seventeen years ago while mowing in a field, he strained his right arm; at the time it seemed only a little stiff, but the feeling of soreness soon passed off. He thinks that at the time he noticed some protrusion of the right shoulder. Fourteen years ago he noticed that the stiffness was more decided in the right shoulder, and then it began also to be troublesome in the left. He also felt a slight aching in the small of the back, and he found that the right shoulder was wasting, and the right arm as far as the elbow. After some time the same wasting came on on the left side. The forearm was never affected; but both hands, and especially the left, and the left thumb, partook of the atrophy. During this time he was still able to work, but two years ago he became so weak that he could only do the lightest kind of farm labor. Last October (1879) he left work and went to St. Thomas' Hospital, where he was received as an in-patient. There he was treated with galvanism and got a good deal better. In February he left the hospital, much better, and was going to try to do some work again, but was sent here by a medical man. On admission, the following notes were taken on the surgical side: "The arms are much atrophied and very weak, but he is in no pain. The scapulae can be made to protrude a great distance beyond the ribs; their lower extremities are tilted out almost at right angles with the back. The chest is flat and square-shaped. The clavicles are large and prominent. The legs are not wasted, but

are rather weak. The serratus magnus is apparently absent on both sides; the upper part of the deltoid is similarly wanting; the great pectoral and trapezius muscles are small. Patient cannot bring his hand to his mouth without having some rest for his elbow, nor can he oppose his thumb; the thumb muscles are much wasted." On trying the muscles with the interrupted current (fourteen cells), the rhomboidei gave no response; the left supra-spinatus responded well; the right supra-spinatus, after a little, did respond, but later on did not; the right and left pectoral muscles answered very slightly to the stimulus; the right deltoid was more irritable than the left. With the continuous current the right infra-spinatus muscles contracted well with twenty cells, the left with fifteen cells. The right and left deltoids contracted slightly with fifteen cells, well with twenty and twenty-five cells. No effect was produced in the region of the serratus magnus. The trapezius contracted well on the application of a current for twenty cells.

The heart beat is very diffused, and the sounds are loud, almost obscuring the breath sounds over a considerable area. There is no bruit; pulse 74, strong. In other respects the patient's condition was normal.

During his stay in the hospital the continuous current has been used, and, as before, some improvement has been effected.

Boracic Acid in Inflammations of Mucous Membranes.

We learn, from the *Maryland Medical Journal* for April, 1880, that at the meeting of the Baltimore Clinical Society, February 21st, Dr. J. Shelton Hill reported a case of gonorrhoea, in which he employed an injection of boracic acid (half a drachm to four ounces); he next saw the patient four days after, and found him perfectly well. Since that he had used it in a primary attack, increasing the strength to ten grains to the ounce. The disease, which had lasted six days, was cured in one week. The patient was a letter carrier, and continued his employment during the treatment.

He has also employed the agent by inhalation, in follicular tonsillitis, with surprising results. So also in post-nasal catarrh. Finally he obtained most satisfactory results in a distressing and painful cystitis, due to long-standing resilient stricture, by injections, morning and night (after drawing the urine), of an eight-grain solution. The patient had required the constant use of anodynes, which he administered himself, hypodermically. Any attempt to walk caused severe paroxysmal pains and desire to micturate. Eight days ago he began the injections; the urine was then so tenacious that it adhered to the vessel when inverted; the night before he had been up to pass his urine thirteen times. The next night this was reduced to seven times, and there was far less pain. On the second night after the treatment the number was four, and no opium was used, for the first time in six weeks. On the fourth night there were two micturations. Since the 18th only one injection daily has been employed. On the 19th the patient was able to take a long walk without

any bad results. The patient had been two months under treatment. At first only a filiform bougie could be introduced, and the stricture had to be dilated. Various astringents had been used for the cystitis, including zinc, acetate of lead, opium, nitrate of silver, etc., but the patient grew steadily worse, until the employment of the boracic acid; then the improvement was immediate. The injections were made through a small flexible catheter, about No. 2. Specimens of urine passed at various stages of the treatment were exhibited, in which the change from a dark brown purulent fluid to a clear one without deposit was very striking.

Aphasia.

The *Lancet*, January 31, 1880, contains the following communication from their correspondent at Paris:—

M. Magnan commenced his course of lectures on Nervous and Mental Pathology on the 18th instant, taking aphasia as the subject of his opening lesson. Setting aside glossoptosis, glosso-ataxia, and other cases in which the instrument of speech is at fault, the lecturer confined his attention to the study of two forms of aphasia depending upon disturbances occurring in the psychomotor region of the brain. Of these, the first, verbal amnesia, would appear to result from lesions either of the third frontal convolution or of the cortical part of the insula, and the function of speech is lost because its organic substratum is destroyed. In logoplegia, on the contrary, the memory of words remains clear, but the subject is unable to reproduce them, and here we find that the cortex is intact, and that the disease is localized in the bundles of fibres emanating from it. An interesting variety of aphasia is word blindness. After an attack of right paralysis, a man aged sixty-four, who was shown by the lecturer, remained aphasic, naming wrongly objects presented for his inspection. A sentence being written in large letters on the board, the patient was unable to copy it, and yet when told to write it down, the same words having been pronounced, he acquitted himself extremely well. Another man of the same age, who had also suffered from right hemiplegia, was able to make a written communication of considerable length on the state of his feelings, but was incapable of reading a single line of his own writing. The explanation of such cases was simple enough. "The encephalic centre which elaborates expression has remained intact, and the fibres which join it to the peripheral organ continue their function. If reading is impossible, it is because the graphic symbol, through some rupture in the conducting fibres, does not reach its centre, and does not there awaken a corresponding idea." It will be seen that M. Magnan is a partisan of what Brown-Sequard calls the *clavier* theory.

When to Perform Ovariectomy.

Edward Borch, M.D., of St. Louis, Mo., in an article on ovarian tumors, published in the *Obstetric Gazette*, for March, 1880, gives it as his opinion, that it would be better to recommend

the operation rather a little too soon than too late, and that the early operation will be the accepted rule in the future, for the following reasons:—

1st. That abdominal section is by far not so dangerous under the antiseptic method, as prior to this, without it. Peritonitis is thereby claimed to be prevented, and we are informed by good authority that we now can operate at least one year sooner. Observe the success Schroeder and others had since they adopted the antiseptic method. (See also Nathan Bozeman's remarks on ovariectomy, *N. Y. Med. Record*, July and August, 1878).

2. As the peritoneal cavity has been opened and exposed in other operations, without peritonitis following, and where waiting for distention was out of the question. For Dr. Martin, of Berlin, has removed five times a floating kidney, four times successfully, by abdominal section. Marion Sims tells us that his operations before Listerism would have been wholly unjustifiable.

So the danger of traumatic peritonitis is greatly reduced by Listerism, and the argument that in anemic patients the danger of secondary hemorrhage is not so likely to occur, seems to me not very solid, though it is true where there is no blood none can flow. I myself should prefer rather a little too much blood than too little; too much we can easily reduce, and we can control a too rapid flow of blood by contracting the blood vessels by ergot, and may thereby prevent oozing. But where there is too little, more is hard to produce.

Six times vaginal ovariectomy has been performed in this country, all early operations, and successfully. The first, I believe, by T. G. Thomas, though it is not his belief that the scope of this plan will ever be very great. But I myself believe a good deal speaks in its favor.

In conclusion I would say, that the object of this communication is to call attention to the above arguments, and especially to the inadvisability recommended, waiting or delaying the operation.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—Part XI of the "Atlas of Histology," by E. Klein, M.D., F.R.S., and E. Noble Smith, L.R.C.P., M.R.C.S., contains four beautiful plates (three of them colored) illustrating the various histological structures of the urinary organs and of the genital organs, both male and female, together with descriptions. Published in Philadelphia, by J. B. Lippincott & Co. London, Smith, Elder & Co.

—"Sea-Air and Sea Bathing," by John H. Packard, M.D., is the eleventh of the series of "American Health Primers," edited by Dr. W. W. Keen. It contains a vast amount of useful information in connection with sea bathing, show-

ing how the greatest possible benefit may be derived therefrom, and pointing out how the accompanying risks may be avoided. As the season for sea bathing is approaching this little book ought to have a rapid sale. Published by Prealey Blakiston, 1012 Walnut street. Price 50 cents per copy.

BOOK NOTICES.

The Venereal Diseases, Including Stricture of the Male Urethra. By E. L. Keyes, A.M., M.D., Professor of Dermatology and Adjunct Professor of Surgery in the Bellevue Hospital Medical College, etc. pp. 348.

A Treatise on Foreign Bodies in Surgical Practice. By Alfred Poulet M.D., Adjutant Surgeon Major, Inspector of the School for Military Medicine at Val-de Grace. In two volumes. Vol. I, pp 271. Vol. II, pp. 320.

A Handbook of Physical Diagnosis, Comprising the Throat, Thorax and Abdomen. By Dr. Paul Guttman, Privat Doctent in Medicine, University of Berlin. Translated from the third German edition by Alex. Napier, M.D., Fel. Fac. Phys. and Surg. Glasgow. With a colored plate and eighty-nine fine wood engravings. pp. 344.

The above are the titles of the four first volumes sent us, of Wood's Library of Standard Medical Authors, for 1880, published by Wm. Wood & Co., 27 Great Jones street, New York. The whole series will comprise twelve octavo volumes of from 250 to 400 pages each, which will be sold by subscription only, at \$15.00 a year. They are gotten up in first-class style, closely printed, on fine paper, and elegantly bound in muslin.

In the work on Venereal Diseases the author has presented in a clear and concise manner the views held at the present time by the highest authorities on the subject, together with such treatment as has been found most successful, avoiding as much as possible discussions on mooted points, and the display of long lists of remedies, which would only lead to confusion. Part I treats of the non-syphilitic venereal ulcer or chancre, and its complications. Among the remedial agents which he recommends in this troublesome affection, iodoform heads the list. In part II, which takes up more than two-thirds of the entire volume, syphilis in all its relations is discussed with thoroughness. Especially are the sections on transmission by inheritance, methods of contagion and the duration of

syphilis, and the question of marriage, very interesting. The author believes in the absolute curability of syphilis, and thinks that many cases would get well without any treatment whatever. Ordinarily he regards it as the best plan to wait until secondary symptoms are developed before beginning the administration of mercury, but he thinks that specific treatment should be continued for three or more years. Part III is devoted to gonorrhoea and its complications, and contains the most recent views on the subject. Forty-one wood engravings, illustrating pathological conditions, instruments, etc., are scattered throughout the work.

The treatise on Foreign Bodies in Surgery, by Dr. Poulet, we believe will be hailed with delight by every one engaged in general practice. Who has not, at some time or other, found himself utterly perplexed when called to see a child who has pushed a pea or a cherry stone into the ear, or perhaps swallowed a fish bone? In this work the subject of foreign bodies, as met with in various parts of the body, is discussed in a systematic way, beginning with a brief consideration of foreign bodies in general, after which foreign bodies of the alimentary canal, of the air passages, of the genito-urinary organs, of the ear, nose, and lastly, of the glandular canal, are taken up in succession, giving the nature of the bodies usually met with in each locality, the mode of their introduction, the symptoms produced, diagnosis, prognosis and treatment. The book contains numerous illustrations, chiefly of instruments for their removal.

In the Handbook of Physical Diagnosis, by Dr. Guttman, the subject of general examination is, after a brief introduction, taken up and considered in its relation to temperature, changes in the color of the skin, condition of nutrition and of subcutaneous tissues. The author then proceeds to the examination of the organs of respiration, the organs of circulation, and the abdominal organs, adding an appendix on laryngoscopic examination and diseases of the larynx. Although nothing new is contained in this work, it furnishes the general practitioner with a larger amount of useful information in connection with the diagnosis of various forms of disease than any other single work with which we are acquainted, and the fact that it has been translated into most of the languages of Europe is perhaps the strongest evidence of its usefulness.

If the four volumes before us may be regarded as fair samples of what the entire series will be, it will make a valuable addition to any physician's library.

THE
Medical and Surgical Reporter,
 A WEEKLY JOURNAL,
 Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

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ABSENCE OF MIND AS A SIGN OF INCIPIENT MENTAL DISEASE.

Among the diseases of modern life it is generally acknowledged that the forms of insanity hold a prominent and increasing frequency. The fact has indeed been discussed and doubted. It has been said that it is their recognition, rather than their actual increase, which has led to this statement. But the most recent investigators incline to the opinion that the growth of mental disease is real, and not apparent only; that it rests upon certain unhealthy conditions of modern society; and that probably it is destined to be yet more positive in the future.

If such is the case, the propriety of the study of mental hygiene will force itself more and more on the profession and the public. Little has been done, so far, in this direction. One class of writers maintain that the prime condition, and almost the only one, required to secure a healthy mind is to have a healthy body; unmindful of the fact that there are scores of lunatics in every large asylum who, so far as their apparent physical condition is concerned, would be received as

first-class risks by any insurance company in the land.

The true principles for the preservation of mental health must be drawn from an attentive study of the physiology of the mind, as well as its pathology. The workings of the mind in health give many hints as to the tendencies which, if allowed to gain the upper hand, lead it insensibly to disease. Perhaps no one trait illustrates this better than the common one of "absence of mind," as it is termed, meaning by this generally that form of waking action which is carried on unconsciously.

Closely allied to it, indeed, merely a form of it, is the process of "unconscious cerebration," which of late years has occupied so much the attention of physiologists. They have demonstrated that often the greater part of our actions are carried out by voluntary effort wholly independent of consciousness. We walk, write, eat, and do a thousand common things, without being in the least aware of the different efforts which we require to perform them. Were we to direct our attention to each of these efforts singly, we should accomplish very little, and the fatigue would be immensely greater. It is habit that facilitates our labors to such an amazing degree.

While it is essential to skill that the muscles must thus work unconsciously, the moment they assert, as it were, their independence of self-consciousness, and prompt to the initiation of efforts outside of what they have been taught, a pathological condition is begun, which we call "absence of mind." Such a habit begins in little things, more generally by an omission than a commission. Thinking of something else while dressing, a part of the toilet is overlooked, the necktie is forgotten, the wrong coat is put on, the hair is unkempt.

Soon, as the habit increases, absurd and even harmful acts are committed. The collections of anecdotes are full of stories of such follies. We knew an able young lawyer who, instead of pouring a tonic from a bottle on his desk, carefully emptied the ink from his inkstand into a spoon and swallowed it! Another, an ex-Attorney General

of the United States, went on a fortnight trip to attend an absorbing legal case. His wife packed a half dozen shirts in his portmanteau. On his return there were no shirts visible. Pushing her inquiries, she found that her husband had regularly donned a clean shirt every other day, as was his wont, but had forgotten to take off the soiled one, and now returned wearing the whole half dozen!

An authentic anecdote of the great political economist, Adam Smith, tells us that when called upon to sign a contract, instead of writing his own name he made an elaborate imitation of the signature of the other party, which had already been affixed.

Such incidents tend to depreciate a man, though perhaps unjustly, in the opinion of those with whom he does business. They become, also, a grave annoyance to the individual himself. In a sense, they are mental weaknesses which, pushed to a certain degree, pass into mental diseases. Senility and insanity are not unfrequently marked by automatic actions, carried out without the will or consciousness of the doer. The absent-minded one, like the sleep-walker, performs actions without knowledge of them, and neglects duties which are pressing. Justly, therefore, it is a source of anxiety with every thoughtful person when he finds himself falling into this bad mental habit.

It is usually gradual in its onset, stealing over one in moments of intense occupation. Unlike many other mind weaknesses, it is not the foe of the idle man so much as the busy one. Yet habits of revery and day dreaming may also bring it about. Wrapped in the enchanting vocation of castle-building, one may forget that his house should stand first in his thoughts.

"Those who feel this habit creeping over them will do well to make an early and special effort to resist it. It can be conquered by a habit of attention, and by a severe self-chiding when the mind yields to it. RUSKIN, who has said many wise things about self-culture, recommends the absent-minded man to take a sea voyage, not as a passenger, but as a sailor, as then his very life

will depend on his constant attention to his surroundings. To quote his own beautiful expression—

"Ocean-work is wholly adverse to any morbid condition of sentiment. Reverie, above all things, is forbidden by Scylla and Charybdis. By the dogs and the depths, no dreaming! The first thing required of us is presence of mind. Neither love, nor poetry, nor piety, must ever so take up our thoughts as to make us slow or unready. In sweet Val d'Arno it is permissible enough to dream among the orange blossoms and forget the day in twilight of ilex. But along the avenue of the waves there can be no careless walking."

NOTES AND COMMENTS.

Therapeutical Notes.

GUARANA IN THE TREATMENT OF EPISTAXIS.

At the session of the Cincinnati Medical Society, February 17, 1880, Dr. John Davis spoke of plugging, the use of astringents, etc., in epistaxis, but dwelt chiefly on the beneficial effects of guarana, which he thought exerted an inhibitory influence on the cranial circulation. He had given the elixir of guarana for epistaxis, in half a tablespoonful doses every hour. In one hour after the remedy had been commenced the bleeding had grown much less, and in another hour it had ceased altogether.

REMEDY IN THE NIGHT SWEATS OF PHTHISIS.

We notice in *Allgem. Med. Central Zeitung*, that Dr. Köhnhom has found the following to be a most efficient application for arresting night sweats:—

| | |
|---------------------|-------------|
| R. Acid. salicylic, | parts 3 |
| Amyli, | parts 10 |
| Talci, | parts 87 M. |

The entire body should be dusted with this powder before retiring to bed.

BENZOATE OF SODA IN GONORRHOEAL OPHTHALMIA.

The *Lyon Med.*, March 7th, tells us that Dr. Dor, who for the last two years has used the benzoate of soda with great success in the purulent ophthalmia of infants, has recently had the opportunity of treating a well marked case of gonorrhoeal ophthalmia, recovery taking place in a few days, without any opacity being left. He kept iced compresses constantly to the eye. The benzoate of soda was employed in a 20 per cent. solution, and tannin in a 10 per cent. solution, ten drops being instilled every three minutes. All secretion which issued from the eye was removed by means of a wash consisting of 100 per cent. solution of the benzoate.

TONIC GLYCERINE.

The *Medical Times and Gazette*, April 24th 1880, mentions that for patients who cannot take cod-liver oil, Dr. Larmaude finds what he calls "tonic glycerine," an excellent substitute: pure glycerine 300 grams ($\frac{3}{4}$ x), tincture of iodine 30 drops, iodide of potassium 30 centigrams (gr.v). A tablespoonful a quarter of an hour before each meal. The appetite soon returns, and constipation, when present, soon disappears. For children and delicate persons he employs 50 grams of syrup of raspberries and 250 of glycerine.

What Candies Contain.

A correspondent sends us the following abstract from one of the New York dailies:—

Dr. Williams, of Chicago, who has found more and worse things in common articles of food than would easily be believed, has been looking for glucose in candy, with results which must strike dismay to the stomachs of candy eaters. One sample of molasses candy was *all* glucose, some caramels had 80 per cent., and cream candy, with 12 per cent. glucose, was nearest pure.

Now, glucose may be both palatable and wholesome, and as legitimate an article of manufacture and sale as any sweet that ever came from Cuba or Louisiana. Unfortunately, that is not the kind of glucose made in this country. Dr. Kenzie, President of the Michigan Board of Health, and Professor of Chemistry in the Michigan State College, found glucose in syrup bought at random, and in the glucose were, among other things, lime, sulphate of iron and copperas. Prof. Mariner found glucose to contain lead and free sulphuric acid, or oil of vitriol. Dr. Williams endorses the statements from his own analyses, and adds that a different result can scarcely be hoped for so long as the process of manufacture continues to be to boil corn starch with oil of vitriol, and mix it with lime. These are facts which it very much concerns people to know, and which are more than sufficient basis for legislation. People should be protected against the possibility of even willfully putting such unwholesome stuff in their stomachs, even if it is cheap and pleasant to the eye and tongue. What seems to be needed is some such law as was passed in the case of oleomargarine—that is to say, sellers should be compelled to state distinctly whether they sell glucose or sugar, so that buyers may make an intelligent choice, and may not unwittingly get one when asking for the other. Unless something of that sort is done the sugar refiners must make glucose, to protect themselves against

ruinous competition. Indeed, there are indications that a movement of that kind has already begun, for the Detroit papers give the details of the establishment of a "sugar" factory, by men of names prominent among the sugar refiners of this city, which is to begin with the consumption of 3000 bushels of corn daily, making 45 tons of glucose in the same time. And a Chicago factory is being planned, with a daily capacity of 20,000 bushels.

Endocarditis Obliterans.

We learn, from the *Medical Times and Gazette*, of an interesting contribution to the pathological anatomy of visceral syphilis which has recently been made by Dr. Ehrlich, of Berlin.

In a fatal case of constitutional syphilis the heart was found to contain numerous foci of disease which might be briefly described as "gummata." Some of these masses were of a deep red or hemorrhagic appearance; others were whitish, or whitish with a hemorrhagic boundary. The origin of these "gummata" was found by Ehrlich to be endarteritis syphilitica obliterans, affecting the smaller vessels—both veins and arteries—in the neighborhood as well as in the centre of the masses. That the obstruction and finally the occlusion of the vessels had been the primary disease, and was not an effect of the other disease, was proved by the appearance of the muscular fibres within the region of the "gumma," which were uniformly and considerably atrophied. In short, the foci of disease were infarcts—partly hemorrhagic and partly anæmic.

Rare Form of Skin Disease.

The *British Medical Journal* informs us that at the meeting of the Pathological Society of London, held April 20th, 1880, Mr. Morrant Baker narrated the case of a woman, aged 53, who presented numerous large, rough warts, deeply pigmented patches, in various parts of the body, but especially on the extensor aspect of the limbs. The patches itched very much, but did not discharge. The disease had lasted for two years and a half. The disease was essentially of a papular or tubercular nature, the large patches being formed by the confluence of a number of tubercles. The skin between the patches was also deeply pigmented. At the elbows, the disease looked like lichen ruber; elsewhere it was more like psoriasis or prurigo. He thought that probably the case ought to be looked upon as belonging to the class to which the President had given the name "lichen psoriasis."

A Correction.

In the report of a *Case of Early Viability*, by Dr. Chas. C. Odlin, of Exeter, N. H., published in the *REPORTER*, March 20th, a mistake of dates occurred which gave rise to comments from some of our correspondents. Dr. Odlin presents his thanks to those who have brought the mistake to view, and requests us to substitute the dates July 11th and July 17th for those of January 11th and January 17th. He further states that the infant died a day or two after his report was written.

CORRESPONDENCE.

Does the Continued Use of Acid Phosphate Induce Urinary Concretions?

ED. MED. AND SURG. REPORTER:—

A short review of the results obtained by the investigation of zoo-chemistry on the causes of this disease may best serve as an answer to this question, which since the death of the ex-Emperor of the French has been put to us quite often by both the lay and scientific public. As well known, physicians distinguish between gravel and calculi, the former having the appearance of white or red sand, the latter of stones of more or less size. The analysis of these concretions, as well as clinical experience, have demonstrated beyond a doubt that their most important and perhaps only cause must be sought in a degeneration of the secretions of the vesical mucous membrane, and that where their occurrence is habitual, it always indicates a state of a severely disordered constitution. Whether the urinary concretion that is formed consists of uric acid, urate of ammonia or earthy phosphates, depends, according to Scherer, solely upon the nature of the fermentative process induced by the condition of the vesical mucus. Clinical analysis of numerous calculi has proven that, in the majority of cases, a clot of mucus forms the nucleus or the first formative basis. Moreover, the inner layers of most calculi contain uric acid, while the outer ones contain urates or earthy phosphates. Prof. C. G. Lehmann, in his excellent *Physiological Chemistry*, says on this subject (Vol. II. page 412), "All who have examined the constitution and formation of numerous urinary concretions, more especially of the larger ones, must be led almost involuntarily to the adoption of Scherer's view. Even the mulberry calculi, which undoubtedly contain a very large proportion of oxalate of lime, but probably never consist solely of this substance, furnish additional corroboration in support of this mode of explanation, for they always contain a large quantity of uric acid, and frequently constitute the nucleus of larger earthy concretions."

Moreover, the majority of urinary concretions consist mostly or wholly of uric acid. The ordinary variety of red gravel, for instance, consists almost exclusively of this acid. Urates with an alkaline or earthy basis have only been discovered as admixtures of uric acid sediments, thus

showing that there must be a predisposition to the formation of this secretion. Phosphatic concretions occur much less frequently than those mentioned, and even less so than the so-called mulberry calculi, and when they occur ("they appear to be deposited from the urine simply from the development of free alkali, either owing to the decomposition of the urea, or to excess of alkaline matter introduced from without.")* Phosphatic salts are also common in the calculi of herbivorous animals, arising from the great alkalinity of their food. Hence, it is evident that the proper use of acid phosphate will as little induce the formation of urinary sediments as the administration of saccharine substances will induce diabetes mellitus. On the contrary, in cases like that just mentioned, they will form a most valuable preventive, and wherever, by paralytic affections of the bladder, the mucus secreted from it cannot be thrown off, on account of deficient contractility, but adheres and begins to be decomposed, the use of phosphates can only be of great benefit. Of all urinal bodies conveyed into the organism, there are none more attractive and retained by the tissues than the phosphates. Every physician knows that rickets frequently if not always occurs simultaneously with the period of dentition, and during pregnancy the consumption of phosphate of lime is so great that the urine exhibits scarcely any traces. During this period of woman's life fractures heal, if at all, only with extreme difficulty. And wherever free acids occur in the parenchyma of the organs, as Prof. Lehmann has proven, acid phosphates are invariably present, or where an acid reaction cannot be directly recognized phosphoric acid is always met with, either conjugated or simply combined with casein, globulin or glycerine.

New York City.

ADOLPH OTT.

* Prof. W. A. Miller, "Organic Chemistry."

Some Remarkable Immediate Effects induced by the Application of the Metals and the Magnet.

ED. MED. AND SURG. REPORTER:—

This subject has attracted much attention, particularly in France, through the experiments of Messrs. Burg, Charcot, and Dumont-Pallier, but is yet sub-judice.

In this communication we intend to recall several cases observed in Professor Charcot's service at the Salpêtrière, and one, in which we became much interested, in Professor Hardy's service at La Charité.

In several cases of color blindness, occurring in hysterical females, M. Charcot applied around the forehead and eyes elastic bands with metal coins sewn in; the greater proportion of the patients could distinguish but one color only, and everything appeared to them of this color; as M. Charcot has shown, certain colors are retained longer than others, and when the vision of the patient returns, the colors return in regular order, the last color lost being the first to return, etc.; this fact is also evident when the colors return after the application of metals, and is considered a valuable means of detecting simulation of color blindness.

Professor Charcot demonstrated that the per-

ception of colors returned in regular order in several hysterical patients, after a short application of the metallic band; in hysterical anæsthesia the effect was remarkable; in several patients the local insensibility was so complete that a large needle was forced through the integuments without provoking the slightest evidence of pain; metallic bands were placed on the arm, and in a very short time the slightest pinch was noticed by the blindfolded patient; but singular to relate, anæsthesia had, in the meantime, affected the other arm. This phenomenon of "transfert" was rendered evident to all present, and though its existence has been denied by Carpenter and other English physiologists, it is undoubtedly seen in clinical cases. In several cases of the fixed, rigid, contracted limbs seen in hysteria, the application of the magnet causes the "transfert" of the contracture, etc., to the opposite limb; a remarkable case of this kind in a hysterical patient with a rigid, contracted forearm, which had been in this state for several months, was presented by M. Charcot; a large horse-shoe magnet was placed near to, and with the poles turned toward, the affected arm; movement gradually returned in the arm, but the other became rigid and fixed; the patient had a very natural repugnance to the application, for it was the left arm which was primarily affected and it was thus transferred into the right; after a few months' treatment, principally by the metals and the magnet, the contracture disappeared.

In a case of hysterical chorea, the direct and immediate results of the application of the magnet were even more remarkable. A young woman entered the service of M. Hardy, at La Charité, with violent choreic movements of both arms; the hands being so violently dashed against the breast, that a thick layer of cotton wool had to be applied over the chest. It was found that there was complete hemianæsthesia, and that when the eyelids were held over the eyes for a few minutes the choreic movements gradually ceased and the patient fell into a state of hypnotic slumber, from which she was easily awakened. The hemianæsthesia, however, remained. On the application of the magnet to the affected side, "transfert" occurred as usual, but if the eyes were shut the patient fell into a state of hypnotic lethargy and remained thus as long as the magnet was in situ; the respiration, circulation and temperature were not modified while the patient was in this state; and M. Landonzy applied the magnet thus to relieve the patient of the pains (clavus hystericus, etc.,) she suffered.

Such are a few of the remarkable effects attending the employment in pathology of the metals and the magnet; wide experience alone will fully determine their value in therapeutics.

Worcester, Mass.

M. J. HALLORAN, M.D.,

Ex-Elève in the Paris Hospital.

—William Sharpey, M.D., LL.D., F.R.S., died at his residence in Torrington Square, April 11th, at the age of seventy-eight years. He was Professor of Anatomy and Physiology in University College, London, from 1836 till 1874 when he retired. He was also a member of numerous learned and scientific societies.

NEWS AND MISCELLANY.

American Medical Association.

The Thirty-first Annual Session will be held in the city of New York, on Tuesday, Wednesday, Thursday and Friday, June 1, 2, 3, and 4, 1880, commencing on Tuesday, at 11 A.M.

"The delegates shall receive their appointment from permanently organized State Medical Societies, and such County and District Medical Societies as are recognized by representation in their respective State Societies, and from the Medical Department of the Army and Navy of the United States.

"Each State, County, and District Medical Society entitled to representation shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number: *Provided*, however, that the number of delegates for any particular State, territory, county, city or town shall not exceed the ratio of one in ten of the resident physicians who may have signed the Code of Ethics of the Association."

Secretaries of medical societies, as above designated, are earnestly requested to forward, at once, lists of their delegates.

SECTIONS.—"The chairmen of the several sections shall prepare, and read in the general sessions of the Association, papers on the advances and discoveries of the past year in the branches of science included in their respective sections. * * * *"—BY-LAWS, Art. II, Sec. 4.

Practice of Medicine, *Materia Medica*, and Physiology: Dr. J. S. Lynch, Baltimore, Md., Chairman; Dr. W. C. Glasgow, St. Louis, Mo., Secretary.

Obstetrics, and Diseases of Women and Children: Dr. Albert H. Smith, Philadelphia, Pa., Chairman; Dr. Robert Battey, Rome, Ga., Secretary.

Surgery and Anatomy: Dr. W. T. Briggs, Nashville, Tenn., Chairman; Dr. C. Powell Adams, Hastings, Minn., Secretary.

Medical Jurisprudence, Chemistry, Psychology, State Medicine and Public Hygiene: Dr. Jas. F. Hibberd, Richmond, Ind., Chairman; Dr. Thos. F. Wood, Wilmington, N. C., Secretary.

Ophthalmology, Otology and Laryngology: Dr. Bolling A. Pope, New Orleans, La., Chairman; Dr. Eugene Smith, Detroit, Mich., Secretary.

The following Committees are expected to report:—

On Prize Essays: Dr. Austin Flint, New York, Chairman.

On Necrology: Dr. J. M. Toner, Washington, D. C., Chairman.

On Catalogue of National Library: Dr. H. C. Wood, Pa., Chairman.

On Ozone: Dr. N. S. Davis, Chicago, Ill., Chairman.

On Metric System: Dr. T. Parvin, Indianapolis, Ind., Chairman.

On State Medical Societies: Dr. S. D. Gross, Philadelphia, Chairman.

To be acted upon: Changes in By-laws proposed by Committee on the address of the President.

1. Expunge from Section III everything relating to Prize Essays, and the Committee on Prize Essays.

2. Introduce into Section II the following laws:—

PRIZE ESSAYS.

a. There shall be four annual prizes of two hundred and fifty dollars each, which shall be awarded at the close of the second year after announcement, as hereinafter explained, for strictly original contributions to medical and surgical progress.

b. It shall be the duty of the chairman of each of the following four Sections—1. Practical Medicine, Materia Medica, and Physiology; 2. Obstetrics and Diseases of Women and Children; 3. Surgery and Anatomy; 4. State Medicine and Public Hygiene—to appoint annually, before the adjournment of the meeting of the Association, three members of ability and good judgment, who shall constitute a Committee of Selection, and who shall, within thirty days thereafter, select and publicly announce for competitive investigation and report, a subject belonging to one or other of the branches of medicine included in the title of the Section.

c. It shall also be the duty of the chairman of each of the Sections mentioned to appoint annually a Committee of Award, consisting of three experts, who shall carefully examine the essays offered for competition, and if any one shall be found worthy of the prize, as a substantial contribution to medical knowledge, to recommend the same to the Association.

d. All essays placed by their authors for competition shall be in the hands of the Chairman of the respective Committees of Award on or before the first day of January preceding the meeting of the Association at which the reports of the committees are required to be made.

e. All Prize Essays shall be considered as the property of the Association.

f. The names of the authors of the competing essays shall be kept secret from the committees, by such means as the latter may provide.

g. Membership in either of the two committees shall not debar from membership in the other: nor shall membership in the Committee of Selection exclude a member from the privilege of offering a competing essay.

Amendments proposed by Dr. John H. Rauch.

AMENDMENT TO THE CONSTITUTION.

Article II, second paragraph, after "Army and Navy," insert "and the Marine Hospital Service of the United States."

Article II, fourth paragraph, at the end, insert, "the Marine Hospital Service of the United States shall be entitled to one delegate."

Will you kindly send to the undersigned a list of your members, with their residences, in order that a correct record may be made of all who are in affiliation with this body?

W. B. ATKINSON, M.D.,
Permanent Secretary.

1400 Pine St.

Wanted.—Part xvi, July, 1875, of the Compendium, for which \$1.00 a copy will be paid, at this office.

Medical Society of the State of Pennsylvania.

The Thirty-first Annual Session will be held in Altoona, on Wednesday, Thursday and Friday, May 19, 20, 21, 1880, commencing on Wednesday, at 11 A.M.

The following may be expected—

The Address in Medicine, by Dr. Thomas W. Shaw, of Pittsburg.

The Address in Obstetrics, by Dr. John T. Carpenter, of Pottsville.

The Address in Surgery, by Dr. John H. Packard, of Philadelphia.

The Address in Hygiene, by Dr. Benjamin Lee, of Philadelphia.

The Address in Mental Disorders, by Dr. Isaac N. Kerlin, of Media.

The following Committees are to report:—

On Medical Legislation, Dr. R. L. Sibbett, Chairman.

On State Board of Health, Dr. W. B. Atkinson, Chairman.

On Epileptics who have become Insane, Dr. John Curwen, Chairman.

On Status of Dr. Seiler, Dr. Traill Green, Chairman.

ORDINANCE (adopted 1877).—No annual address, save that of the President, shall, in its delivery, exceed *thirty* minutes. No voluntary paper shall exceed *twenty* minutes. Opportunity for debate shall be furnished immediately after the reading of each address or paper. The time for such debate shall be limited to *thirty* minutes, unless extended by vote of the Society. No speaker shall be allowed to speak a second time without the consent of the Society, and the time allotted to each speaker shall not exceed *ten* minutes.

Secretaries of County Societies are earnestly requested to forward at once to the Permanent Secretary complete lists of the names and residences of their officers and members.

All who propose to attend the session at Altoona should apply to the undersigned, with stamp, for orders for excursion tickets. The lines of the Pennsylvania Central and of the Philadelphia and Reading Railroad will carry excursionists to the session at reduced rates.

WM. B. ATKINSON, Permanent Sec'y.
1400 Pine Street, Philadelphia.

Night Medical Service.

A bill for the organization of a night medical service in New York city has been introduced into the Legislature. The bill is divided into eight sections. The first provides for the registry, by the captains of the several police precincts, of the names and addresses of all physicians in good and regular standing within their jurisdiction who shall make application for such registry. But such lists must be submitted to the Registrar of Vital Statistics of the Board of Health, whose duty it shall be to pass upon the regularity of each name, and to transmit a certificate to the effect that the physician named therein is in good and regular standing. Upon receipt of such certificate, the name of the physician is posted upon the precinct bulletins, and he becomes liable to night medical calls. The fee is fixed at \$3, to be paid

by the Cashier of the Board of Health, and the night physician may call an expert, surgical or medical, in council, when the urgency of the case demands it. The expenditure is limited to \$3000 per year. The bill is accompanied by a petition praying for its passage, which is signed by the leading members of the profession.

Renunciation of Homœopathy.

The Pacific Medical and Surgical Journal, April 17th, remarks—

Some time ago we mentioned the fact of the County Hospital at Sacramento being placed in the hands of the homœopaths. Among the drugs used by them and paid for by the city, according to the published statement of Dr. Tyrrell, were 1450 two-grain quinine pills and three pounds of salicylic acid, supplied by one druggist, and 800 two-grain quinine pills, one ounce of quinine and a considerable quantity of morphia, by another. In fact, the medicine bill was so high, that from this cause, in part, the authorities removed the homœopathic doctor and appointed a "regular." It is time for homœopaths to throw off the mask with which they have been deceiving the public, and to make an honest confession that they cannot cure disease without resorting to the regular system.

A Monstrosity.

According to the *Cincinnati Gazette*, a lady at or near Nashville, Miami county, Ohio, gave birth, on April 9th, to a still-born male child having a face resembling a bulldog, but otherwise fully developed. It seems that the mother, at the period of two months' gestation, had received a fright, caused by her husband shooting a bulldog, and the child was delivered at seven months. The countenance is an almost exact imitation of a bulldog, with hare lip, flat nose, flattened eyes, large mouth, and the head set upon the shoulders with no development of neck. There was a peculiar hole in the back of the head, said to be at the same position where the bullet struck the dog, and on the back of the child is a mark like that left on the neck of the dog by the burning of the powder. Dr. Senour, of Troy, who attended the lady, has the child preserved in alcohol.

Quintuple Birth.

A woman living near New Glasgow, N. S., recently gave birth to five children, all of whom have, however, died since. Dr. P. D. Keyser, of this city, has exhibited to us a photograph of the quintuple babies lying side by side in their "little bed." The photograph was sent him by Dr. Hyde, of Truro, N. S., who stated that the children would probably have lived, if they had had any chance. The parents were extremely poor, and lived six miles away from where anything could be got for them. There was nothing in the house to even wrap them up in, and the Doctor had to take the blind of the only window to make bandages.

Domestic Lighting.

The *Lancet* informs us that Dr. Phipson has succeeded, to a considerable extent, in solving the question of economical lighting of dwellings. This is accomplished by increasing, by a weak electric current, the phosphorescence of certain substances influenced by the solar rays. For example, sulphide of barium is enclosed within a Geissler tube, through which a constant current of a given intensity is made to pass. By this means, it is asserted, a uniform and agreeable light may be obtained, at a cost less than that of gas.

An Epidemic of Chorea.

A singular calamity has befallen the Ursuline Convent, in Brown county, Ohio. The trouble is the breaking out, in epidemic form, among the pupils, of St. Vitus' dance. The malady made its appearance two or three weeks ago, but was not considered serious until within a few days, when, finding that it had become epidemic, and in one case, at least, had resulted fatally, the parents of the pupils were requested to remove their children.

QUERIES AND REPLIES.

C. A. L., Philadelphia.—We refer you to the Surgeon General, U. S. A., and the Chief of Bureau of Medicine and Surgery, U. S. N., Washington, D. C.

B. H., of Cuba, N. Y.—Gall-stones are, according to Greene's Medical Chemistry, usually of a light brown color, greasy to the touch, and so soft that they may be readily crushed. We do not know whether there be any exception to this rule; perhaps some of our readers may enlighten us on the subject.

W. R. M., of Mississippi, writes:—In answer to query as to treatment of chronic nettle rash, try Seidlitz powders. When a boy I suffered greatly from nettle rash; I remember well how deathly sick it made me, and the two or three doctors in attendance during these spells pined my poor stomach with:

"Physic of high and low degree,
Calomel, catnip, boneset tea."

Having an attack in Mobile, after I was grown up, I was fortunate enough to fall into the hands of the late Dr. J. C. Nott, for treatment. He prescribed for me Seidlitz powders, and they acted like magic. While not recommended as a cure-all, the remedy is simple, pleasant, and certainly worth trying.

C. H. M. requests us to inform Dr. S. D. P., of Ill., that Dr. G. J. Fisher, of Sing Sing, New York, published a work on Maternal Mental Emotions, a reprint from Vol. xxvi of the *American Journal of Insanity*, January, 1870. Roberts, publisher, Utica, New York.

MARRIAGES.

ALLEN-TOWNSEND.—In New York, on Wednesday evening, April 28th, 1880, at the Church of the Annunciation, by the Rev. T. W. Allen, M.A., Rural Dean of Durham and Rector of Cavan, Canada, assisted by the Rev. William Jones Seabury, A.M., D.D., Dr. Thomas Herbert Allen and Blanche Dowd, third daughter of the late Dr. John F. Townsend, of New York.

PORTER-HOBART.—On the 21st ult., at Fairfield, Connecticut, by the Rev. James K. Lombard, William G. Porter, M.D., of this city, and Susie M., daughter of Edmund Hobart, Esq., of Fairfield.